ABSTRACT

A beverage dispenser includes an electronic control system for controlling beverage dispenser components. The beverage dispenser components include at least a user interface, a dispensing valve, and a valve interface for regulating the delivery of a beverage from the dispensing valve. The electronic control system includes a microcontroller for monitoring the user interface and for activating the valve interface responsive to user input, thereby regulating the delivery of a beverage from the dispensing valve. The electronic control system further includes a program memory with firmware configured in a state machine system architecture for controlling the microcontroller. The state machine system architecture supports either a non-preemptive or a preemptive multitasking real time operating system. The firmware includes supervisory control firmware, dispenser tasks firmware, and low level drivers firmware.